WHAT IS CLAIMED IS:

1.   A method of encoding a video stream, comprising:

(a)   receiving a current video frame of the video stream;

(b)   subdividing the current video frame into blocks of a selected block size, and comparing the blocks to corresponding blocks of a decoded version of a preceding video frame to determine whether any of the blocks of the current video frame are sufficiently unchanged from the preceding frame to be discarded;

(c)   repeating (b) using at least one additional block size, such that the current video frame is separately subdivided and compared to the preceding video frame using multiple block sizes;

(d)   selecting from the multiple block sizes a block size that produces a best video compression result; and

(e)   encoding the video frame in the video stream with the block size selected in (d).

2.   The method as in Claim 1, further comprising repeating (a), (b), (c), (d), and (e) for each of multiple frames of the video stream to generate an encoded video stream in which different frames are encoded using different block sizes.

3.   A method of encoding a video stream, comprising:

receiving a current video frame of the video stream;

determining which of multiple possible block sizes produces a best result for encoding the current video frame, wherein the block sizes are used to subdivide and compare the current video frame and a preceding video frame to determine whether any blocks of the current video frame are sufficiently unchanged to be discarded;

compressing the current video frame using the block size determined to produce the best result, and storing the compressed video frame in conjunction with an indication of said block size.

4.   A method of encoding video, the method comprising:

dividing a video frame into blocks according to a uniform block size;

identifying changed blocks by comparing each block to the corresponding block in a decoded version of the previous frame;

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copying changed blocks into a contiguous block of memory; and

adding preamble block.

5.   The method as in Claim 4, wherein the preamble block indicates the blocks that are included in the contiguous block of memory.

6.   The method as in Claim 5, wherein the preamble block indicates the block size used to encode the video frame.

7.   The method as in Claim 4, wherein the preamble block size varies.

8.   The method as in Claim 4, wherein the comparison comprises determining luminance difference from the corresponding block in the encoded version of the previous frame.

9.   The method as in Claim 8, wherein the luminance difference threshold value is pre-defined.

10.   The method as in Claim 4, wherein the contiguous memory block is compressed using an LZW-like compression algorithm.

11.   The method as in Claim 10, wherein the compression algorithm used is zLIB.

12.   The method as in Claim 10, wherein the compression algorithm used is LZO.

13.   A method of encoding video, the method comprising:

encoding a video frame using a first uniform block size to create a first encoded frame;

encoding the same video frame using a second uniform block size to create a second encoded frame;

comparing the size of the first encoded frame to the second encoded frame; and

selecting the uniform block size that results in a smaller encoded frame.

14.   An encoded video stream comprising:

video frames wherein the video frames are encoded using multiple block sizes; and

preamble blocks including bitmaps of the encoded video frames and indicators indicating the block size used to encode the video frames in the video stream.

15.   A method of decoding an encoded video stream, comprising:

receiving the encoded video frame encoded using multiple block size detection method;

decompressing the received video frame;

determining the block size used to encode the video frame;

determining which blocks are present in the encoded video frame;

copying the blocks present in the encoded video frame into the display area; and

displaying the video frame.

16.   A method as in Claim 15, wherein key frames can be used to decode a sequence of frames starting at a location other than its beginning.

17.   A method as in Claim 15, wherein the key frames can be used to seek forward and backward within the sequence of frames.

18.   A data processing system comprising:

a server computer comprising a video encoder application for encoding video streams using multiple block size detection method;

a client device comprising a decoder application for decoding and displaying the encoded video streams; and

a video encoder module for encoding video streams using multiple block size detection method comprising block detection component, crunching component, and compressing component.

19.   A system for encoding and decoding video, the system comprising:

identifying means for detecting pixel blocks which have changed from a previous decoded video frame;

storing means for copying the changed pixel blocks and a preamble block;

compressing means for compressing the changed pixel blocks and the preamble block; and

identifying means for selecting a smallest encoded frame.

20.   A method of encoding a video stream, the method comprising:

(a)   subdividing a current video frame into blocks of a selected block size;

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(b)   identifying blocks of the current video frame that differ by at least a minimum extent from corresponding blocks in a decoded version of a preceding video frame;

(c)   repeating (a) and (b) using at least one additional block size, such that the current video frame is subdivided and compared to the preceding video frame using a plurality of block sizes; and

(d)   selecting from the multiple block sizes a block size that produces a best video compression result.

21.   The method as in Claim 20, further comprising

(e)   encoding the video frame using each of the plurality of block sizes.

22.   The method as in Claim 21, wherein (d) is performed based upon the results of (e).

23.   The method as in Claim 22, further comprising repeating (a), (b), (c), (d), and (e) for each of multiple frames of the video stream to generate an encoded video stream in which different frames are encoded using different block sizes.

24.   A method of encoding a video frame, the method comprising:

providing a decoded preceding video frame;

subdividing the video frame into a plurality of blocks, wherein each block comprises at least one pixel;

identifying the blocks of the current video frame that differ by at least a minimum extent from corresponding blocks in the decoded preceding video frame;

creating a map of the locations of the identified blocks in the video frame;

arranging the map and the identified blocks in a substantially contiguous block of memory; and

applying a compression process to the data in the substantially contiguous block of memory.